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Remarks:

Regarding the rejection of claims 1-10 under 35 USC 103(a) as allegedly being unpatentable over U.S. Patent No. 3,686,120 to Creely in view of U.S. Patent No. 3,095,307 to Scott et al. (hereinafter "Scott"):

Applicants respectfully traverse the rejection of the foregoing claims in view of Creely and Scott.

Prior to discussing the merits of the Examiner's position, the undersigned reminds the Examiner that the determination of obviousness under § 103(a) requires consideration of the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1 [148 USPQ 459] (1966): (1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the pertinent art; and (4) secondary considerations, if any, of nonobviousness. *McNeil-PPC, Inc. v. L. Perrigo Co.*, 337 F.3d 1362, 1368, 67 USPQ2d 1649, 1653 (Fed. Cir. 2003). There must be some suggestion, teaching, or motivation arising from what the prior art would have taught a person of ordinary skill in the field of the invention to make the proposed changes to the reference. *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). But see also *KSR International Co. v. Teleflex Inc.*, 82 USPQ2D 1385 (U.S. 2007).

A methodology for the analysis of obviousness was set out in *In re Kotzab*, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000) A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher."

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It must also be shown that one having ordinary skill in the art would reasonably have expected any proposed changes to a prior art reference would have been successful. *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1207, 18 USPQ2d 1016, 1022 (Fed. Cir. 1991); *In re O'Farrell*, 853 F.2d 894, 903-04, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988); *In re Clinton*, 527 F.2d 1226, 1228, 188 USPQ 365, 367 (CCPA 1976). "Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure." *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988).

The Patent Office acknowledges that Creely does not teach use of compositions comprising glucose oxidase, glucose, or catalase (see page 4 of the Office Action). The Patent Office introduces Scott as allegedly teaching use of deoxygenating compositions comprising deoxygenators, such as a composition comprising glucose oxidase, glucose and catalase. The Patent Office further alleges (1) one of ordinary skill in the art would have been motivated to combine these teachings Scott with Creely, (2) the compositions of Creely and Scott were equivalents known for the same purpose constituting *prima facie* obviousness, and (3) it would have been obvious to combine the teachings of Scott and Creely to arrive at the claimed invention. Applicants respectfully disagree with these allegations.

Neither Creely nor Scott, taken singly or in combination, teaches or suggests an aerosol product comprising a sealed metal canister containing an aerosol composition comprising an oxidase enzyme and a substrate for the oxidase enzyme as required by claim 1.

Creely teaches an aerosol composition including a combination of corrosion inhibiting materials (see col. 1, line 14 of Creely). More specifically, Creely teaches use of two conventional anti-corrosion agents which are simple reducing agents, such as morpholine and inorganic sodium or potassium nitrite (see col. 1, lines 69-71 of Creely).

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Scott discloses containerized products which comprise an oxidase enzyme. Scott teaches a dry pulverulent material comprising a solid carrier or base, glucose and a nonviable enzyme system having glucose oxidase activity, which may be intermingled with a dry product (i.e., dry foods for humans or animals) or separated from the dry product by a gas permeable barrier (see col. 1, lines 15-18 and col. 2, lines 13-26 of Scott). Additionally, Scott teaches use of a solid deoxygenating body comprising a solid carrier or base, preferably of porous character, having deposited therein and thereon a deoxygenating composition (see the paragraph bridging columns 1 and 2 of Scott). Thus, the oxidase enzyme of Scott is clearly located in or on a solid carrier (see Examples 1-7 of Scott).

Besides including the two conventional anti-corrosion agents, the aerosol composition of Creely also includes formaldehyde which is preferably employed as a 40% solution (see col. 2, lines 23 and 24 of Creely). Formaldehyde is a known germicide and a preservative of organic matter. As a result, the presence of formaldehyde in the aerosol composition of Creely would essentially prevent or hinder any enzymatic operation therein.

One of ordinary skill in the art would not have interchanged the simple reducing agents in the Creely composition with a more complex and particularly "living" de-oxygenation system (oxidase enzyme) of Scott because the composition of Creely (as exemplified) comprises formaldehyde. Thus, one of ordinary skill in the art would not have been motivated to modify Creely with Scott as alleged by the Patent Office because the addition of "live" enzyme, such as oxidase enzyme, to the composition of Creely would lead to thwarting of the oxidase enzyme activity.

Even if the oxidase enzyme of Scott would have been interchanged with the simple reducing agents of Creely as alleged by the Patent Office, the resulting aerosol composition would have been inoperable and/or ineffective for de-oxygenation because the formaldehyde in the aerosol composition would have suppressed the oxidase enzyme activity.

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Additionally, Scott fails to teach or suggest use of oxidase enzyme that would be suitable for use in an aerosol composition in a sealed metal canister of an aerosol product. Moreover, Scott does not teach use of oxidase enzyme for application in aerosol products. Instead, Scott teaches use of oxidase enzyme for protecting dry and/or solid food products (see col. 2, lines 13-26 and claim 8 of Scott). One of ordinary skill in the art would not have been motivated to modify the aerosol composition of Creely with the oxidase enzyme of Scott because the solid carrier/oxidase enzyme of Scott is not suitable for use in an aerosol composition or product.

Thus, one having ordinary skill in the art would not have been motivated to modify the teaching of Creely, by replacing the simple reducing agents of Creely (in the presence of formaldehyde) with the solid carrier/oxidase enzyme of Scott, to achieve the presently claimed aerosol product and methods.

Therefore, neither Creely nor Scott, taken singly or in combination, teaches or suggests an aerosol product comprising a sealed metal canister containing an aerosol composition comprising an oxidase enzyme and a substrate for the oxidase enzyme as required by claim 1. Additionally, Creely and Scott, taken singly or in combination, fail to teach or suggest a method of deoxygenating an aerosol product having the step of supplying to an aerosol canister an oxidase enzyme and a substrate for the oxidase enzyme, an aerosol composition, and a propellant as required in claim 5. Creely and Scott, taken singly or in combination, also do not teach or suggest a method of inhibiting corrosion of a sealed and pressurized aerosol canister having the step of providing an aerosol composition comprising an oxidase enzyme and a substrate for the oxidase enzyme as a corrosion inhibiting system to the said aerosol canister as recited in claim 7.

Because these features of independent claims 1, 5 and 7 are not taught or suggested by Creely and Scott, taken singly or in combination, these references would not have rendered the features of claims 1-10 obvious to one of ordinary skill in the art.

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Accordingly, reconsideration and withdrawal of the rejection of claims 1-10 under 35 U.S.C. 103(a) are respectfully requested.

Should the Examiner in charge of this application believe that telephonic communication with the undersigned would meaningfully advance the prosecution of this application, they are invited to call the undersigned at their earliest convenience. The early issuance of a *Notice of Allowability* is solicited.

CONDITIONAL AUTHORIZATION FOR FEES

Should any further fee be required by the Commissioner in order to permit the timely entry of this paper, the Commissioner is authorized to charge any such fee to Deposit Account No. 14-1263.

Respectfully submitted,

By Andrew N. Parfomak

Andrew N. Parfomak, Esq.
Reg. No. 32,431
Norris, McLaughlin & Marcus
875 Third Avenue, 18th Floor
New York, NY 10022
Tel. 212-808-0700

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Andrew N. Parfomak

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29 Aug 2008
Date